

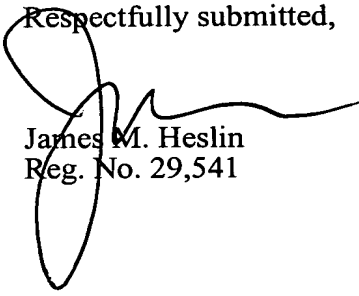
REMARKS

Applicants request examination of the above-substitute claim set.

Attached is a marked-up version of the changes made to the specification and claims by the current amendment. The attached page is captioned with "VERSION WITH MARKINGS TO SHOW CHANGES MADE."

If for any reason the Examiner believes that a telephone conference would in any way expedite prosecution of the subject application, the Examiner is invited to telephone the undersigned at 650-326-2400.

Respectfully submitted,


James M. Heslin
Reg. No. 29,541

TOWNSEND and TOWNSEND and CREW LLP
Two Embarcadero Center, 8th Floor
San Francisco, California 94111-3834
Tel: (415) 576-0200
Fax: (415) 576-0300
JMH:jke
PA 3138321 v1

A

VERSION WITH MARKINGS TO SHOW CHANGES MADE

1. (Amended) A system for repositioning teeth from an initial tooth arrangement to a final tooth arrangement, said system comprising a plurality of dental incremental position adjustment appliances including:
a first appliance having a geometry selected to reposition the teeth from the initial tooth arrangement to a first intermediate arrangement;
one or more intermediate appliances having geometries selected to progressively reposition the teeth from the first intermediate arrangement to successive intermediate arrangements; and
a final appliance having a geometry selected to progressively reposition the teeth from the last intermediate arrangement to the final tooth arrangement, wherein at least some of the appliances are marked to indicate their order of use.

7. (Amended) A method for repositioning teeth from an initial tooth arrangement to a final tooth arrangement, said method comprising:
placing a first incremental position adjustment appliance in a patient's mouth, wherein the first appliance has a geometry selected to reposition the teeth from the initial tooth arrangement to a first intermediate arrangement;
successively replacing one or more additional appliances, wherein the additional appliances have geometries selected to progressively reposition the teeth from the first intermediate arrangement to successive intermediate arrangements; and
placing a final appliance into the patient's mouth, wherein the final appliance has a geometry selected to progressively reposition the teeth from the last intermediate arrangement to the final tooth arrangement, wherein at least some of the appliances are marked to indicate their order of use.

Please cancel claims 14-21.

22. (Amended) A method for producing a plurality of digital data sets representing a series of discrete tooth arrangements progressing from an initial to a final arrangement, said method comprising:
providing a computer system having at least once processor and memory;

A

5 providing to the computer system an initial [a] digital data set representing an
6 initial tooth arrangement;

7 providing to the computer system a final [a] digital data set representing a final
8 tooth arrangement;

9 producing a plurality of successive digital data sets based on both of the provided
10 initial and final digital data sets, wherein said plurality of digital data sets represent a series of
11 successive tooth arrangements progressing from the initial tooth arrangement to the final tooth
12 arrangement; and

13 annotating the data sets to add text or numbering.

1 24. (Amended) A method as in claim 22, wherein the step of providing a
2 digital data set representing a final tooth arrangement comprises:

3 defining boundaries about at least some of the individual teeth on a visual image
4 provided by the computer system; and

5 moving at least some of the tooth boundaries relative to the other teeth in the
6 visual [an] image [based on the digital data set] to produce the final data set.

1 29. (Amended) A method for fabricating a plurality of dental incremental
2 position adjustment appliances, said method comprising:

3 providing an initial [a] digital data set representing an initial tooth arrangement;

4 providing a final [a] digital data set representing a final tooth arrangement;

5 producing a plurality of successive digital data sets based on both of the initial and
6 final [provided] digital data sets, wherein said plurality of digital data sets represent a series of
7 successive tooth arrangements progressing from the initial tooth arrangement to
8 the final tooth arrangement; [and]

9 annotating the data sets to add text or numbering;

10 fabricating appliances based on at least some of the produced digital data sets,
11 wherein the text or numbering appears on the appliances.

1 39. (Amended) A method for fabricating a dental appliance, said method
2 comprising:

3 providing a digital data set representing a modified tooth arrangement for a
4 patient, said data set including text or numbering;

A

controlling a fabrication machine based on the digital data set to produce a positive model of the modified tooth arrangement, wherein the text or numbering appears on the positive model; and

producing the dental appliance as a negative of the positive model, wherein the text or numbering appears on the dental appliance.

42. (Amended) A method for fabricating a dental appliance, said method comprising:

providing a first digital data set representing a modified tooth arrangement for a patient;

producing a second digital data set from the first data set, wherein the second data set represents a negative model of the modified tooth arrangement; and

controlling a fabrication machine based on the second digital data set to produce the dental appliance, wherein the appliance is marked with text or data.

New claims 45-79 have been added.

